FlyBy Math™ Alignment to
Nevada Mathematics Content Standards
February 25, 2003 Edition

Content Standard 1.0: Numbers, Number Sense, and Computation
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will accurately calculate, use estimation techniques, number relationships, operation rules, and algorithms; they will determine the reasonableness of answers and the accuracy of solutions.

Application

Content Standard	*FlyBy Math*™ Activities
1.6.2 Apply decimals, fractions, and percents to solve mathematical and practical problems.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Content Standard 2.0: Patterns, Functions, and Algebra
To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use various algebraic methods to analyze, illustrate, extend, and create numerous representations (words, numbers, tables, and graphs) of patterns, functions, and algebraic relations as modeled in practical situations.

Patterns

Content Standard	*FlyBy Math*™ Activities
2.6.1 Use and create tables and charts to extend a pattern in order to describe a rule.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Relationships

Content Standard	*FlyBy Math*™ Activities
2.6.2 Identify, model, describe, and evaluate relationships using charts and tables, with and without technology.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system.

Equation Solutions

Content Standard	*FlyBy Math*™ Activities
2.6.7 Use a rule to create a table and represent the ordered pairs on a **coordinate grid**.	--Represent distance, speed, and time relationships for constant speed cases using tables, bar graphs, line graphs, equations, and a Cartesian coordinate system. --Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

Content Standard 3.0: Measurement

To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will use appropriate tools and techniques of measurement to determine, estimate, record, and verify direct and indirect measurements.

Proportion and Ratio

Content Standard	***FlyBy Math™* Activities**
3.6.5 Use ratios to describe and compare relationships between various objects.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

Content Standard 4.0: Spatial Relationships and Geometry

To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will identify, represent, explain, verify, and apply spatial relationships and geometric properties.

Coordinate Geometry and Line of Symmetry

Content Standard	***FlyBy Math™* Activities**
4.6.3 Using a coordinate grid, identify coordinates for a given point and locate points of given coordinates; plot geometric shapes in all four quadrants.	--Plot points on a schematic of a jet route, on a vertical line graph, and on a Cartesian coordinate system to describe the motion of two airplanes.

Line, Slopes, and Linear Equations

Content Standard	***FlyBy Math™* Activities**
4.6.5 Model **slope** (pitch, **angle of inclination**) using concrete objects and practical examples.	--Represent distance, speed, and time relationships for constant speed cases using linear equations and a Cartesian coordinate system. --Interpret the slope of a line in the context of a distance-rate-time problem.

Content Standard 5.0: Data Analysis

To solve problems, communicate, reason, and make connections within and beyond the field of mathematics, students will collect, organize, display, interpret, and analyze data to determine statistical relationships and probability projections.

Data Collection and Organization

Content Standard	***FlyBy Math™* Activities**
5.6.1 Interpret data using various formats including circle graphs.	--Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes. --Represent distance, rate, and time data using tables, line plots, bar graphs, and line graphs.

Design	
Content Standard 5.6.6 Analyze data in a variety of formats to draw conclusions and make predictions.	***FlyBy Math*™ Activities** --Choose among tables, bar graphs, line graphs, a Cartesian coordinate system, and equations to model aircraft conflicts and predict outcomes. --Use tables, bar graphs, line graphs, equations, and a Cartesian coordinate system to draw conclusions.